



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590**

MEMORANDUM

DATE: June 28, 2005

SUBJECT: Region 5 Response to the CSTAG Updated Recommendations on the Allied Paper/Portage Creek/Kalamazoo River Superfund Site

FROM: Shari Kolak, Remedial Project Manager
Region 5

TO: Stephen J. Ells
Leah H. Evison, Co-chairs
Contaminated Sediments Technical Advisory Group (CSTAG)

Background

On October 12, 2004, the Region 5 project manager for the Allied Paper/Portage Creek/Kalamazoo River Superfund Site (the Site) in Michigan gave an update on the site progress to the Contaminated Sediments Technical Advisory Group. This meeting was held in Fairhaven, MA. During this meeting, the Region 5 project manager received valuable feedback from members of the CSTAG. In December 2004, CSTAG presented an updated list of recommendations to Region 5 as presented below. This memorandum provides Region 5's response to the CSTAG updated list of recommendations for the Site.

Principle #1, Control Sources Early

The groundwater contribution of PCBs to the river appears to be a continuing data gap for both landfills and floodplain deposits. Consider additional evaluations to determine if PCBs in groundwater are or will be a significant source to surface water.

EPA Response to the CSTAG Recommendation

Region 5 is now working with a specialized modeling firm to develop a fate and transport model for the Kalamazoo River. Region 5 asked the modelers to evaluate whether PCBs in groundwater from all sources, including landfills and floodplains, represent is a

significant source of PCBs to the Kalamazoo River. The modelers recently completed the first phase of modeling and will present the results to the modeling technical advisory group the end of June. Given the lack of groundwater data (particularly in the floodplain deposits) it is unlikely the modelers will be able to make any conclusions as to whether groundwater from the floodplains represents a significant source of PCBs to surface water at this time. Region 5 expects that this may be a significant data gap the modelers may identify in the second phase of modeling. Region 5 will be happy to update the CSTAG after the June modeling meeting occurs. Region 5 has discussed the need for groundwater data in the floodplain deposits with the Michigan Department of Environmental Quality (MDEQ). It is likely that groundwater data from the floodplains will be gathered either before or after an Administrative Order on Consent (AOC) is signed between EPA and the PRPs to conduct future sampling at the river. Region 5 will also look for other ways to expedite the collection of this data.

Groundwater data at two of the four landfills at the Site are already being collected. At the Allied Paper landfill, groundwater samples are collected periodically and at the King Highway landfill, groundwater samples are collected on a quarterly basis. Groundwater at the remaining landfills, the 12th Street and Willow Boulevard/A-Site are not being collected on a regular basis at this time. This is because remedial design has not begun at 12th Street and a Record of Decision has not yet been signed for Willow Boulevard/A-Site. The modelers have all existing groundwater data on the landfills and will receive future groundwater data as it becomes available.

Principle #2, Involve the Community Early and Often

The CSTAG commends the site team for developing fact sheet and other notices and posting them on the Kalamazoo River Project web site and for conducting a public workshop on modeling. We encourage the team to continue this practice on other important issues that may arise.

EPA Response to the CSTAG Recommendation

Region 5 appreciates the CSTAG comment, and will continue to keep the public involved as important issues arise. Region 5 has also been meeting bimonthly with members of the Michigan State legislature to keep them updated on the progress at the site.

Principle #3, Coordinate with States, Local Governments, Tribes, and natural Resource Trustees

- In light of reported funding constraints by the State and the long term nature of remedy decision-making at this site, the CSTAG encourages the Region to ensure that fish consumption advisories are as effective as possible by educating the public about the existing fish consumption advisories and by posting new fish consumption advisory signs that are easier to understand. To the extent possible, this should be done

in coordination with the State.

EPA Response to the CSTAG Recommendation

Region 5 received permission from the Michigan Department of Public Health to xerox and distribute the fish consumption advisory pamphlet. Region 5 brings the pamphlets to every public meeting so the public is aware of the fish advisory. Region 5 believes the fish advisory signs are understandable but believes more signs should be posted along the river. After the CSTAG meeting, Region 5 learned that MDEQ has posted fish advisory signs at all popular fishing spots but that these signs continue to be vandalized or torn down at many different locations. MDEQ has made numerous attempts to replace the signs and recently purchased some lower-cost signs in an effort to reduce costs in light of the on-going vandalism. Region 5 will continue to work with MDEQ to improve the effectiveness of the signs.

Principle #6, Carefully Evaluate the Assumptions and Uncertainties Associated with Site Characterization Data and Site Models

- Currently, emphasis is being placed on collecting data for the fate and transport and bioaccumulation models. While this is important, data collection needs should not be limited to this, but should focus also on answering the most significant remaining questions concerning the conceptual site model as a whole. Other empirical data may be important for decision-making at the site that are not related to the models.
- The Region should clarify the questions that the models are being developed to answer and address how the uncertainty in the modeling results will be described, and to the extent possible, quantified.
- Since the fate and transport model being developed for the site is a modified version of the Agency's AFDC model, the STAG supports the Region's decision to have the newly developed or modified model components (e.g., new computer code) peer reviewed before deciding to use the model, in order to assess whether the new or modified components are operating as intended.
- In future update meetings, summaries of important data such as the major exposure parameters used in modeling, PCB and sediment loadings from floodplains and ungaged tributaries, the key uncertainties in the baseline data, and the human health and ecological risks should be presented and discussed as part of the briefing to the CSTAG.

EPA Response to the CSTAG Recommendation

Region 5 will be negotiating an AOC for future sampling at the river. Region 5 expects that all data relevant to decision making at the river, irrespective of modeling data needs, will be collected as part of future sampling efforts. There are two questions the modeling is being designed to answer: (1) what are the relative contributions of the key PCB sources to PCB concentrations in fish and (2) how will different remedial alternatives affect future fish PCB levels. By answering these questions, the Region expects to focus remedial efforts on the key PCB sources and to quantitatively predict the effects on fish levels. A thorough sensitivity analysis is planned for the modeling effort. Boundary calculations will be performed allowing Region 5 to quantitatively state uncertainty where possible. Region 5 also hopes to use the post-remediation conditions for additional validation.

Future updates to CSTAG will include those items requested under Principle #6, bullet 4.